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APPLICATION NO.	FIL	ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,725	09/26/2003		Toshikazu Yamauchi	OKI378	6644
23995	7590 .	10/28/2004		EXAMINER	
RABIN & Berdo, PC				TADESSE, YEWEBDAR T	
1101 14TH	STREET, N	IW			
SUITE 500	SUITE 500				PAPER NUMBER
WASHINGTON, DC 20005				1734	

DATE MAILED: 10/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)					
Office Action Summer	10/670,725	YAMAUCHI, TOSHIKAZU					
Office Action Summary	Examiner	Art Unit					
	Yewebdar T Tadesse	1734					
The MAILING DATE of this communication apperiod for Reply	pears on the cover sheet with the c	orrespondence address -					
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONET	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
Status		•					
1) Responsive to communication(s) filed on							
2a) This action is <b>FINAL</b> . 2b) ☐ This	action is non-final.						
3) Since this application is in condition for allowa							
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.					
Disposition of Claims							
4)⊠ Claim(s) <u>1-9</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-3,5 and 6</u> is/are rejected.	Claim(s) <u>1-3,5 and 6</u> is/are rejected.						
7) Claim(s) <u>4, 7-9</u> is/are objected to.							
8) Claim(s) are subject to restriction and/o	r election requirement.						
Application Papers							
9)⊠ The specification is objected to by the Examine	r						
10)☐ The drawing(s) filed on is/are: a)☐ acc		xaminer.					
Applicant may not request that any objection to the	-						
Replacement drawing sheet(s) including the correct		•					
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a)	-(d) or (f).					
1.☐ Certified copies of the priority document	s have been received						
2. Certified copies of the priority document		on No					
3. Copies of the certified copies of the prior							
application from the International Bureau							
* See the attached detailed Office action for a list	of the certified copies not received	d.					
Attachment(s)  Notice of References Cited (PTO-892)							
2) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary ( Paper No(s)/Mail Dat	PTO-413) e					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) 🔲 Notice of Informal Pa	tent Application (PTO-152)					
Palent and Trademark Office	6)  Other:						

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#### **DETAILED ACTION**

### Specification

1. The disclosure is objected to because of the following informalities: In the applicant's spec. on page 2, lines 19 and 25, the words "points" and "suck-back" are misspelled. On various areas of the specification (see for instance, page 2, line 13; page 6, line 13; page 7, line 14; page 8, line 18; page 9, line 19; page 10, line 3) spaces between respective words are omitted. Appropriate correction is required.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Kitano et al (US 2002/0124798 A1). As to claim 1, Kitano et al discloses (see Fig 6, paragraphs 66-67) a resist applying device comprising an air-bubble collecting part provided on a resist flow passage at a predetermined part of a nozzle pipe directly connected to a nozzle tip (a check portion K for the outlet pipe 96 is provided at predetermined position of a nozzle pipe and suction apparatus 102 in communication

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with the outlet pipe 96, which is connected to the discharge nozzle 85). As to claim 6, in Kitano et al the check portion K the nozzle pipe (96) is transparent (see paragraph 66).

### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 6. Claims 2-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitano et al (US 2002/0124798 A1) as applied to claim 1 and further in view of JP-09206584. As to claim 2-3, Kitano et al lacks teaching a nozzle pipe having an external appearance in a shape of curved in an inverted U-form or a shape as continuing in a rise part, a horizontal part and a fall part. However, JP'584 discloses (see Abstract and Figs 1 and 6) a nozzle pipeline used for a liquid chemical in semiconductor manufacturing process, wherein the pipe line having an external appearance in a shape of an inverted U-form (see Fig 6) and a shape as continuing in a rise part, a horizontal

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part and a fall part (see Fig 1). It would have been obvious to one of ordinary skill in the art at the time the invention to shape Kitano et al's pipeline (outlet pipe 96) as continuing in a rise part, a horizontal part and a fall part to easily remove a gas outside the pipe line as taught by JP'584 (see English translation Abstract). It would also have also been obvious to one of ordinary skill in the art at the time the invention was made to form the external appearance of Kitano et al's piping in an inverted U shape as desired in similar way as shown by JP'584. Regarding claim 5, Kitano et al's pipeline as modified by JP'584 is capable of being designed to have an internal bulk of pipe securing a photoresist amount greater than a photoresist amount of once projection.

## Allowable Subject Matter

- 7. Claims 4 and 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 8. The following is a statement of reasons for the indication of allowable subject matter: JP' 584 discloses (see Fig 6) an inverted U-shaped pipe having a portion of gas 54 collected on the side and near the summit of the U-shaped pipe 51. The rise and fall parts of the curved piping are not shown in Fig 6 of JP' 584. There is no reference in the prior art search that disclosed, taught or suggested a photoresist applying device comprising, among others, a nozzle pipe having a curved part made at between the rise

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part and the fall part, wherein the curved part having a top dead center serving as an

air-bubble collecting part.

9. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Yewebdar T Tadesse whose telephone number is (571)

272-1238. The examiner can normally be reached on Monday-Friday 8:00 AM-4: 30

PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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CHRIS FIORILLA SUPERVISORY PATENT EXAMINER

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